

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date:

Region: Raleigh Regional Office
County: Edgecombe
NC Facility ID: 3300170
Inspector's Name: Matthew Mahler
Date of Last Inspection: 02/12/2019
Compliance Code: W / Violation - procedures

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): HC Composites LLC</p> <p>Facility Address: HC Composites LLC 1090 West Saint James Street Tarboro, NC 27886</p> <p>SIC: 3732 / Boat Building and Repairing NAICS: 336612 / Boat Building</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p style="text-align: center;">Permit Applicability (this application only)</p> <p>SIP: 02D .0515, .0521, .1806 NSPS: NA NESHAP: VVVVV PSD: NA PSD Avoidance: NA NC Toxics: NA 112(r): NA Other:</p>
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Contact Data			Application Data
<p style="text-align: center;">Facility Contact</p> <p>Chris Brockway Vice President of Prod. Development (252) 641-8000 1090 West Saint James Street Tarboro, NC 27886</p>	<p style="text-align: center;">Authorized Contact</p> <p>Chris Brockway Vice President of Prod. Development (252) 641-8000 1090 West Saint James Street Tarboro, NC 27886</p>	<p style="text-align: center;">Technical Contact</p> <p>Chris Brockway Vice President of Prod. Development (252) 641-8000 1090 West Saint James Street Tarboro, NC 27886</p>	<p>Application Number: 3300170.19A Date Received: 09/13/2019 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 08819/T06 Existing Permit Issue Date: 03/03/2015 Existing Permit Expiration Date: 02/29/2020</p>

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2018	---	---	29.29	---	---	23.92	22.68 [Styrene]
2017	---	---	5.42	---	---	5.29	5.29 [Styrene]
2016	---	---	3.80	---	---	5.09	5.09 [Styrene]
2015	---	---	2.05	---	---	4.50	4.05 [Styrene]
2014	---	---	5.92	---	---	4.70	4.31 [Styrene]

<p>Review Engineer: Eric Crump</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 08819/T07 Permit Issue Date: Permit Expiration Date:</p>
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1. Purpose of Application

HC Composites LLC (HC Composites) is a boat manufacturing facility located in Tarboro, Edgecombe County, North Carolina. The facility operates under Title V Permit No. 08819T06 with an expiration date of February 29, 2020. HC Composites has applied for renewal of their facility's air quality permit. The renewal application was due September 2, 2019, six months prior to the expiration date, but was received September 13, 2019. Therefore, the existing permit shall expire unless the renewal permit has been issued prior to the existing expiration date. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Through permit application No. 3300170.19A, HC Composites included no changes to the existing permit:

2. Facility Description

HC Composites is a boat manufacturer, focusing mainly on making catamarans. The facility employs about 100 people and operates one shift per day, four days per week. Approximately 240 boats are manufactured in a typical year. There are four distinct manufacturing processes at the facility: lay up and spray, sanding and fitting, rigging and assembly, and cleanup and shipping. Only the lay up and spray operations require air permitting, as they generate emissions of styrene and VOCs.

The hull and deck of the boats are formed during lay up and spray with boat molds. The inner hull is made of resin and fiberglass, while its outer shell is made of gel coat. First, the molds are coated with a Teflon wax. The molds are then spray-coated with a gel coat. Next, chopper guns cut polyester fibers to one-inch lengths and mix it with styrene-based resin and the mixture, known as "chop", is sprayed on the molds to form fiberglass. Several layers of chop and woven fiberglass matting are alternated according to the boat specifications. The resin can also be applied manually, especially for the added matting. A catalyst (methyl ethyl ketone peroxide) is incorporated into the resin/ fiberglass mix (1.5% by weight) to hasten the curing process. Some small closed molding equipment is also used to produce some of the smaller pieces that are attached to the main hull. The facility continues to increase use of a closed molding system for making boat hulls, which should significantly reduce VOC/HAP emissions.

Once cured, sanding and grinding of the hulls are performed in a partially enclosed work area (open on both ends) in the center of the building. Dust is drawn through slots in the walls, directed through hanging bagfilters, and vented back indoors. This process is considered exempt from air regulations because the particulate emissions are contained within the building. Finishing touches such as patchwork, assembly of stringers, Plexiglas windshields, decals, etc., are made to the boats before they are cleaned and prepped for shipping.

3. Application Chronology

March 3, 2015	Permit No. 08819T06 issued to HC Composites for Title V renewal.
April 13, 2015	Division of Air Quality (DAQ) issues Notice of Violation (NOV) to HC Composites for failure to reference a Notice of Deficiency (NOD) in their annual compliance certification for calendar year 2014.
December 15, 2015	Compliance inspection conducted by Will Wike, Raleigh Regional Office (RRO). Review of the facility's work practice logbook indicated that required

	monitoring or recordkeeping was not performed from June through November 2015.
December 30, 2015	DAQ issues NOD to HC Composites for missing monthly work practice inspection records.
November 17, 2016	Compliance inspection conducted by Will Wike, RRO. The facility appeared to be in compliance with all permitting requirements.
May 18, 2018	Compliance inspection conducted by Matthew Mahler, RRO. The facility did not have records available documenting work practice inspections or compliance with MACT Subpart VVVV requirements.
June 1, 2018	DAQ issues NOV to HC Composites for missing monthly work practice inspection and MACT Subpart VVVV compliance records.
July 16, 2018	DAQ issues NOV to HC Composites for late submittal of annual emission inventory for calendar year 2017.
February 19, 2019	DAQ issues NOV to HC Composites for failure to submit their second half 2018 02D .0958 Work Practices for Sources of VOCs semiannual report by the due date.
July 15, 2019	DAQ issues NOV to HC Composites for late submittal of annual emission inventory for calendar year 2018.
September 13, 2019	DAQ issues NOD to HC Composites for failure to submit a permit renewal application by the due date specified in their Title V permit.
September 13, 2019	Permit renewal application No. 3300170.19A received by DAQ. As noted above, this renewal application was not deemed timely.

4. Permit Modifications and Title V Equipment Editor (TVEE) Discussion

The following table summarizes changes to the HC Composites permit resulting from the permit renewal:

Page No.	Section	Description of Changes
Cover and throughout	---	<ul style="list-style-type: none"> Updated all dates and permit revision numbers Changed all citations of 15A NCAC 2D to 15A NCAC 02D Changed all citations of 15A NCAC 2Q to 15A NCAC 02Q
4	2.1 A.1.a	Updated section to reflect the most current stipulations for 15A NCAC 02D .0515
	2.1 A.3.a	Inserted "Applicability" heading
5	2.1 A.3.e. i., ii	Changed "A record must be kept" to "The Permittee must keep a record"
6	2.1 A.3.f.ii	Added CFR citation to table
8	2.1 A.3.l, n	Added CFR citation to table

Page No.	Section	Description of Changes
9	2.1 A.3.r	Inserted the text “Table 3 in” before the citation “40 CFR Part 63. Subpart VVVV” in the explanation of the variable PV_u
10	2.1 A.3.r	Added CFR citation to table
	2.1 A.3.u	Changed CFR reference to permit stipulation
12	2.1 A.3.ll	Added 40 CFR 63.5761 to list of citations in the “Reporting” heading above
13	2.1 A.5	Deleted 02D .0958: Work Practices for Sources of Volatile Organic Compounds
	3	Updated General Conditions to Version 5.3 dated August 21, 2018

No changes were made to the TVEE.

5. Description of Changes and Estimated Emissions

There have been no changes at the HC Composites facility (e.g., new sources, modifications, process changes) that have resulted in changes to estimated emissions.

6. Regulatory Review

The HC Composites facility is subject to the following regulations in 15A NCAC:

- 02D .0515: Particulates from Miscellaneous Industrial Processes
- 02D .0521: Control of Visible Emissions
- 02D .1806: Control and Prohibition of Odorous Emissions

As discussed in the previous application review (B.Gatano, March 3, 2015), particulate and visible emissions from the facility have been estimated to be very small—far lower than the limits allowed by regulation. For these reasons, HC Composites has not been required to do monitoring, recordkeeping, or reporting for particulate and visible emissions. This permit renewal does not affect this status. Continued compliance is expected.

The facility had also been subject to 02D .0958, Work Practices for Sources of Volatile Organic Compounds. On November 1, 2016, 15A NCAC 02D .0902 for VOC emissions was amended, narrowing applicability of the VOC work practice standards from statewide to the maintenance area for the 1997 8-hour ozone standard. Because Edgecombe County is not part of the maintenance area, 02D .0958 no longer applies to the HC Composites facility. Requirements pertaining to 02D .0958 have been removed from the permit.

7. National Emission Standards for Hazardous Air Pollutants (NESHAPS): Maximum Achievable Control Technology (MACT)/Generally Available Control Technology (GACT)

The HC Composites facility is subject to 40 CFR Part 63, Subpart VVVV, National Emission Standards for Hazardous Air Pollutants from Boat Manufacturing. The facility does not employ emission control devices, and meets the emission limits of this rule through one of two options:

- *MACT model point value averaging (emissions averaging) option*—demonstrating that emissions from the open molding resin and gel coat operations that are averaged meet the emission limit.

Any operations and materials not included in the emissions average must comply with the compliant material option.

- *Compliant materials option* –demonstrating compliance by using resins and gel coats that meet the organic HAP content requirements in the rule.

As discussed in detail in the previous application review (B. Gatano, March 3, 2015), the D.C. Circuit Court of Appeals vacated the startup, shutdown and malfunction (SSM) exemptions contained in the General Provisions of the NESHAP (40 CFR 63.6(f)(1) and (h)(1)) (Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008)). Because Subpart VVVV had incorporated these SSM provisions by reference, this meant the HC Composites facility would have had to comply with their NESHAP limits during SSM events. To address this situation, the following language was added to Section 2.1 A.3.b of the permit:

During the periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the emission sources (ID Nos. LA-1 and LA-2), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the Permittee reduce emissions from the above emission source to the greatest extent which is consistent with safety and good air pollution control practices.

This permit renewal does not affect this status. Continued compliance is expected.

8. New Source Performance Standards (NSPS)

The HC Composites facility is not subject to any NSPS. This permit renewal does not affect this status.

9. New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

The facility is considered a minor source under PSD, with potential VOC emissions of less than 250 tons per year. This permit renewal does not affect the PSD status of the facility.

10. Risk Management Program (Clean Air Act, Section 112(r))

40 CFR Part 68 requires stationary sources that hold more than threshold quantities of regulated substances to develop a risk management plan (RMP), in accordance with Section 112(r) of the Clean Air Act. The RMP identifies the potential effects of a chemical accident, steps the facility is taking to prevent an accident, and emergency response procedures if an accident occurs.

This facility is not subject to the Risk Management Program requirements, since it does not store any of the regulated substances in quantities above the thresholds in the rule. This permit renewal does not affect this status.

10. Compliance Assured Monitoring (CAM)

40 CFR Part 64 establishes requirements for compliance assurance monitoring (CAM). This rule applies to any pollutant specific unit that meets the following three conditions:

- the unit is subject to any (non-exempt: e.g. pre-November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.

- the precontrol potential emission rate for the unit exceeds either 100 tons per year for criteria pollutants, 10 tons per year of a single HAP, or 25 tons per year of multiple HAPs.

CAM does not apply to the HC composite facility, because it does not have emission control devices. This permit renewal does not affect that status.

11. Facility-wide Toxics Review

All NC toxic air pollutant (TAP) sources at the HC Composites facility are subject to MACT standards. North Carolina G.S. 143-215.107(a) exempts emission sources subject to MACT standards from NC air toxics regulations provided their emissions do not “present an unacceptable risk to human health,” in accordance with G.S. 143-215. 107(b)”. As part of the 2015 permit renewal, DAQ conducted an evaluation to demonstrate that actual emissions from these sources do not pose an unacceptable risk to human health., and found no TAP emissions exceeded the toxic permit emission rates (TPERs). Therefore, the emission sources of TAP at the facility present no unacceptable risk to human health, so stipulations related to 02D .1100 (“Control of Toxic Air Pollutants”) and 02Q .0711 (“Emission Rates Requiring a Permit”) were removed from the permit at the time of the 2015 renewal. This permit renewal does not affect that status, as there have been no changes to the facility causing a change in TAP emissions.

12. Facility Emissions Review

The table in the header page of this review summarizes emissions totals for HC Composites after applying required emission controls for the years 2014-2018. As noted in the 2018 emissions inventory, emissions of VOCs and toxics (methyl ethyl ketone and styrene) increased significantly in 2018. This is due to a large increase in coating material use throughput, reflecting an increase in production. Despite this increase, the facility appears to be in compliance with permit requirements. Continued compliance is expected.

13. Compliance Status

Since the HC Composites permit was renewed in 2015, the facility has demonstrated a history of missing inspection records and failure to submit required reports on time, as shown in the following table.

Date	Action Taken by DAQ	Reason for Action
April 13, 2015	NOV	Failure to reference a Notice of Deficiency (NOD) in their annual compliance certification for calendar year 2014
December 30, 2015	NOD	Missing monthly work practice inspection records from June through November 2015
June 1, 2018	NOV	Missing monthly work practice inspection and MACT Subpart VVVV compliance records
July 16, 2018	NOV	Late submittal of annual emission inventory for calendar year 2017
February 19, 2019	NOV	Failure to submit their second half 2018 02D .0958 Work Practices for Sources of VOCs semiannual report by the due date
July 15, 2019	NOV	Late submittal of annual emission inventory for calendar year 2018

Date	Action Taken by DAQ	Reason for Action
September 13, 2019	NOD	Failure to submit a permit renewal application by the due date specified in their Title V permit

The facility was last inspected on May 18, 2018 by Matthew Mahler of the Raleigh Regional Office. Other than the discrepancy noted in the June 1, 2018 NOV, the facility appeared to be in compliance with all applicable requirements at that time.

14. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. Virginia is an affected state within 50 miles of the facility. There are no affected local air quality programs within 50 miles of the facility.

15. Other Regulatory Considerations

A P.E. seal was not required for Permit Application No. 3300170.19A.

No zoning consistency determination was required for Permit Application No. 3300170.19A.

No permit fee was required for Permit Application No. 3300170.19A.

16. Recommendations

DAQ has reviewed the permit application(s) for HC Composites LLC located in Tarboro, Edgecombe County, North Carolina to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 08819T07.